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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TSE, YOUNG TOI

ART UNIT PAPER NUMBER

2637

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/823,410

Applicant(s)

CHIN, HON WAH

Examiner

YOUNG T. TSE

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 is/are allowed.
- 6) ☒ Claim(s) 1,3-8,10-13 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 9 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Holcombe is not concerned with nor has any disclosure relating to determining data rate for a digital data stream. Botti does not disclose a system for determining a data rate nor does Botti disclose a plurality of measuring cells or a measurement node for determining a minimum pulse width. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
2. Applicant's arguments, see pages 10, line 15 to page 11, line 11, filed August 31, 2005, with respect to the rejection of claims 1-2 and 7-17 under 35 U.S.C. 112, first paragraph, have been fully considered and are persuasive. The rejection of claims 1-2 and 7-17 has been withdrawn.

Drawings

3. The drawings were received on August 31, 2005. These drawings are acceptable.

Claim Objections

4. Claims 14 and 17 are objected to because of the following informalities: in claim 14, line 2, "voltage" should be "voltage level" and in claim 17, line 7, "a RC circuit" should be "an RC circuit". Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 3, 10-13 and 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, the determining step lacks cooperation or connection with the measuring step (rejected once already in the last Office Action).

In claim 10, lines 4-5 and 5, the phrases "the capacitor for the pulse" and "that pulse" both lack antecedent basis since they are unclear the pulse of from the plurality of pulses (claim 8, lines 4-5) or the pulse of the digital data stream (claim 10, line 3).

The dependent claims 11-13 and 16 are depended upon claim 10.

In claim 17, lines 7-8, the phrase "the duration of the pulse" lacks antecedent basis (rejected once already in the last Office Action).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Holcombe et al.

Holcombe et al. (U.S. Patent No. 6,360,090) discloses a method and apparatus in Figure 1 or Figure 2 for receiving infrared signals that is better able to receive a data signal in the presence of a noise signal.

With respect to claims 1 and 3, the width of pulses from the input Din (or Dir) is measured by a detect comparator 160 (or AGC peak detector 36) of the RC time constant 146 and 148 (or 28 and 30) to determine a minimum pulse width and use the minimum pulse width of the output pulse Dout to inter the data rate of the input infrared signals. See col. 2, line 56 to col. 3, line 15.

9. Claims 8 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Botti et al.

Botti et al. (U.S. Patent No. 6,594,309) discloses a digital input PWM power amplifier in Figure 1 includes an oversampling and noise shaping circuit receiving pulse code modulated (PCM) digital input data organized in words of a first number of M bits at

a bit rate, and outputting PCM digital data organized in words of a smaller number of N bits at a multiple bit rate.

With respect to claim 8, the PCM to PWM converters correspond to the plurality of measuring cells for measuring the width of pulses of the MSB of P-bit PCM data and the LSB of P-bit PCM data from the oversampling and noise shaping circuit and a power stage having a summing node for determining a minimum pulse width of the pulses. See abstract and col. 6, lines 9-12.

With respect to claim 15, a timing controller (not shown) for controlling the F clocks of the PCM to PWM converters.

Allowable Subject Matter

10. Claim 2 is allowed.

11. Claims 4-6, 10-13 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claim 14 would be allowable if rewritten to overcome the objection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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14. Claim 17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

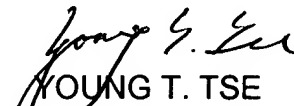
Hatfield et al (U.S. Patent No. 4,888,763) relates to a preamble is modified to include collision detection data comprising synchronization pulses followed by an initial large pulse having an amplitude sufficiently high to be detected even when attenuated and having a pulse width twice the normal data pulse width and a unique forty-one bit code which corresponds to a forty-one bit code assigned to a transceiver.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday-Thursday and alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The Central FAX Number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


YOUNG T. TSE
Primary Examiner
Art Unit 2637